



City of Santa Barbara
Airport Department

Memorandum

DATE: March 18, 2009
TO: Airport Commission
FROM: Karen Ramsdell, Airport Director
SUBJECT: 2008 Integrated Pest Management Annual Report

Recommendation:

That Airport Commission recommend that City Council accept the City of Santa Barbara, Integrated Pest Management Strategy, 2008 Annual Report, dated March 2009.

Background:

The City of Santa Barbara adopted an Integrated Pest Management (IPM) strategy in January 2004 to reduce the amount and toxicity of pesticides used by the City and, where feasible, to eliminate pesticide use in public areas using alternative methods. This report highlights only Airport portions of the attached 2008 IPM Annual Report.

In early 2006, the City adopted the Pesticide Hazard and Exposure Reduction (PHAER) Zone model. In that model areas of the Airport were mapped based on potential human and environmental pesticide hazard and exposure risk, as green, yellow or special circumstance (red) zones. Accordingly pest control products were evaluated on a range of human and environmental toxicity measures and rated as green, yellow or special circumstance (red). On a continuum, green products have low human and environmental toxicity, while there is high concern over the human and/or environmental toxicity traits associated with special circumstance (red) products. The model informs an applicator of the appropriate type of product to use in a specific area of the City.

Significant Airport Achievements:

- Amount and toxicity of pesticides used to control mosquitoes, airfield weeds and rodents decreased in 2008.
- Increased alternative, non-chemical, weed control efforts by 6.4% to 15,834 hours in 2008.
- Due to lack of rainfall, and a revised approach by the Mosquito and Vector Control District, substantially reduced amount of yellow material applied to control mosquitoes.
- Dramatically decreased the use of Ditrac for control of rodents.

Airport Alternative Efforts:

Well over 15,000 hours were devoted to manual weed control at the Airport in 2008. A majority of those efforts were associated with maintenance of Airport green zones outside the airfield fence and maintenance of native habitat restoration areas.

Maintenance of native habitat restoration associated with the Airfield Safety Project continued in 2008. The goal of the maintenance effort is to reduce non-native competition so that the newly planted native species can become established (and require less maintenance). Over time as native plants flourish, maintenance requirements will decrease.

In addition to direct weed control, Airport staff used mechanical methods to control rodents in Airport green zones.

In 2007, an Airport contactor inadvertently applied an unapproved material to eradicate bees that had colonized inside the wall of an Airport building. In 2008, Airport revised its procedure to insure a less toxic approach by enlisting the services of a beekeeper. The beekeeper removed and relocated two swarms of bees during 2008.

Airport Pesticide Use:

Airport pesticide applications are concentrated on three types of pests: mosquitoes, rodents and weeds. The weather cycle directly impacts production of weeds and mosquitoes. In 2008, generally dry conditions shortened the length of the mosquito season and limited growth of weeds on the airfield. Airport also treated one building for subterranean termites in 2008.

Exemptions

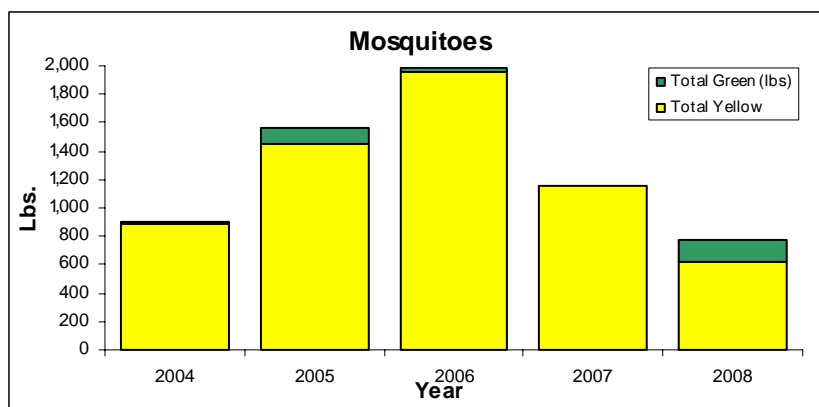
The Airport requested and was granted three exemptions to use special circumstance or materials that do not appear on the "approved materials" list during 2008. The approved exemptions were for Termidor SC (subterranean termites), Vikane (drywood termites) and Fumitoxin (gophers). Only Termidor SC was actually used in 2008.

Mosquitoes:

Airport teams with the Mosquito and Vector Management District of Santa Barbara County to manage mosquito populations on Airport property. The District monitors mosquito populations, recommends the appropriate management approach and performs mosquito abatement activities on behalf of the Airport. The District typically employs mosquito larvicide products to prevent the emergence of adult mosquitoes.

Mosquitoes are controlled at the Airport with a pretreatment of an extended release larvicide (Altosid XR), applied prior to the wet season. The product is effective for approximately 180 days after it is activated by the first rains of the season. In an effort to reduce the toxicity of materials applied in the Slough, for the 2008 – 2009 mosquito season, the District will rely less on Altosid XR, a yellow material, and more on *Bacillus thuringiensis israelensis* (BTI) based green products (Vectobac G and Vectolex CG) for control.

In 2008 Airport applied 620.5 lbs. of Altosid XR, 5 lbs of Vectobac G and 155 lbs Vectolex CG.

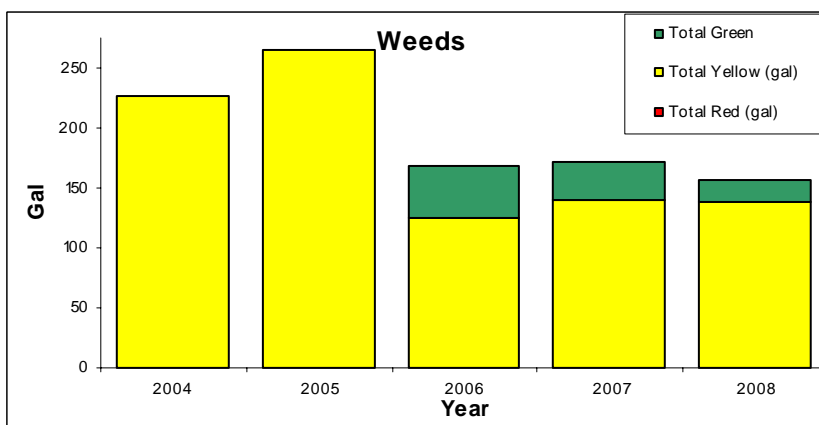


Weeds:

The Airport's chemical weed abatement program is focused on the Airfield. Weeds on the Airfield may obstruct views of lighting and signage for pilots using Airport runways and taxiways and may eventually damage paved runway and taxiway surfaces.

Airfield herbicide applications for 2008 decreased slightly over 2007. Along Airport light lanes Surflan is applied as a pre-emergent to prevent the growth of most weeds. Roundup Pro is then used, in mostly spot applications, to control weeds that grow despite the Surflan. Both Surflan and Roundup Pro are categorized as "Yellow" materials.

In 2008 the Airport applied 60 gallons of Surflan and 76.875 gallons of Roundup Pro on the Airfield. In addition, the Airport applied 19 gallons of Burnout II, a "Green" material to control weeds in PHAER green zones, outside the airfield fence.



Weeds - Hollister Traffic Islands:

In 2008 an Airport contractor inadvertently applied 96 ounces of Roundup QuickPro, a red material on the Hollister traffic island yellow zone, in violation of the IPM program. The

contractor is now required to receive written permission from Airport staff prior to application of any herbicide.

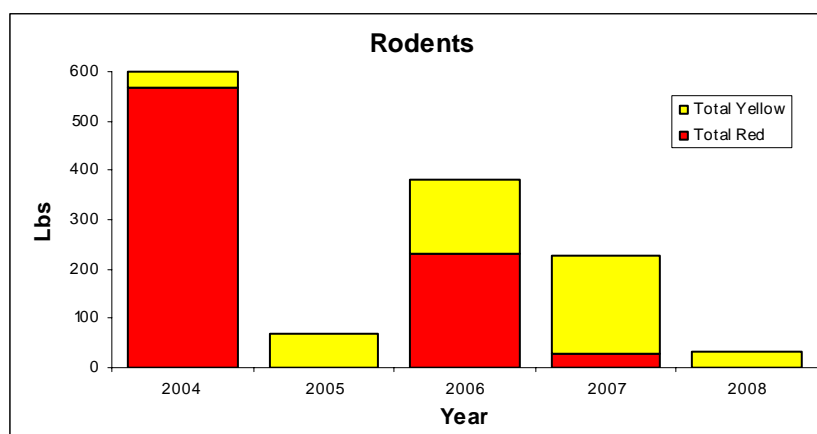
The contractor subsequently asked and received approval to apply XL2G, an approved yellow material on this area. The contractor applied 25 lbs. of XL2G. Note neither of these applications are included in the “Weeds” graph above.

Rodents:

Rodents control activities are important to the Airport because of the direct damage they do to airfield safety areas and the attraction they pose to predators. Predators attracted to rodent prey increase the risk of aircraft strikes.

The application of rodent control products decreased substantially in 2008 when compared to the previous year. Despite receiving an exemption for use, no red, rodent control materials were used in 2008. Airport also substantially reduced the amount of Ditrac (yellow) that was applied.

During 2008, Airport Department used 33.125 lbs of Ditrac, a diphacinone based, yellow material to control rats and mice.



Termites:

In addition to the materials discussed above, staff hired a contractor to treat one Airport building for subterranean termites. The contractor applied .98 gallons of Termidor SC, after the Airport received an exemption from the IPM Advisory Committee for its use.

Citywide IPM Effort Totals:

The Airport Department is the major user of pesticides in the City. Airport Department used 88% of all liquid pesticides and 88% of all dry pesticides applied by the City in 2008, but also contributed over 67% of the alternative effort hours that were recorded citywide.

2009 Airport IPM Outlook:

Thus far in 2009 Airport well behind normal rainfall. As a result, mosquito and weed populations are expected to be similar to 2008. Mosquito and Vector Management District

will assess the effectiveness of increased use of green BTI based materials and make recommendations for applications to be made for next mosquito season. A wet spring could significantly increase the amount of material needed to control mosquitoes. Future projects that further expand tidal circulation in the Slough are also expected to reduce the amounts of pesticides necessary for mosquito control.

In April 2009 Airport will be tenting two buildings for control of drywood termites. Due to the size and use of the buildings, the IPM Advisory Committee approved an exemption for use of Vikane (a red material) for the two buildings.

Airport also expects to see an increase in the use of both diphacinone and Fumitoxin in 2009 for control of rodents on the airfield.